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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,689	08/27/2001	Michael Knaupp	340058.534	4320
500 7590 01/18/2008 SEED INTELLECTUAL PROPERTY LAW GROUP PLLC 701 FIFTH AVE SUITE 5400 SEATTLE, WA 98104				
			EXAMINER PRONE, JASON D	
			ART UNIT 3724	PAPER NUMBER
			MAIL DATE 01/18/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

09/940,689

Applicant(s)

KNAUPP ET AL.

Examiner

Jason Prone

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-9, 11, 13-22, 24, 26-34, 36-43 and 63-66 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-9, 11, 13-22, 24, 26-34, 36-43, 63 and 66 is/are allowed.
- 6) ☒ Claim(s) 64 and 65 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claim 65 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 65 recite the limitations "the high pressure fluid assembly" on line 6, "the swivel" on line 7, and "the high pressure tubing" on line 8. There is insufficient antecedent basis for these limitations in the claim.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:  
  
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
5. Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd (6,126,524) in view of Leslie et al. (3,978,748). Shepherd discloses the invention including a cutting head assembly (26) having a body adapted to receive an orifice at an orifice location for generating a high pressure fluid jet (32), a mixing tube coupled to the body of the cutting head assembly downstream of the orifice location (40), a motion assembly (12) coupled to the cutting head via a clamp positioned around

the body of the cutting head (72), and a nozzle body assembly removably coupled to the cutting head assembly (22, it is old and well known that parts of the fluid jets cutters are removably coupled), the clamp capable of holding the cutting head when the nozzle body is separated from the cutting head assembly allowing access to the orifice location without removing the cutting head from the clamp (72).

However, Shepherd fails to disclose a position sensor coupled to the clamp adjacent the cutting head assembly, the position sensor being provided with a tip that is angled toward an end of the mixing tube, and an end region of the tip being adjacent to the end of the mixing tube.

Leslie et al. teach it is old and well known in the art of fluid jet cutters to incorporate a position sensor coupled to the clamp adjacent the cutting head assembly (49), the position sensor being provided with a tip that is angled toward an end of the mixing tube (51), and an end region of the tip being adjacent to the end of the mixing tube (Fig. 5). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Shepherd with a position sensor, as taught by Leslie et al., because all claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective function and the combination would have yielded predictable results.

6. Claim 65 is rejected, as best understood, under 35 U.S.C. 103(a) as being unpatentable over Shepherd in view of Hoaki (4,900,198). Shepherd discloses the invention including a cutting head (26) having a body adapted to receive an orifice at an

orifice location for generating a high pressure fluid jet (32), a mixing tube coupled to the body of the cutting head downstream of the orifice location (40), a motion assembly coupled to the cutting head (12), and a high-pressure fluid assembly being coupled to the cutting head to deliver high-pressure fluid (22).

However, Shepherd fails to disclose a swivel allowing tubing to follow motion.

Hoaki teaches it is old and well known in the art of high-pressure fluid assemblies to incorporate a swivel allowing tubing to follow motion imparted thereon (12).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Shepherd with a swivel, as taught by Hoaki, to prevent the high-pressure tubes from getting tangled while the machine moves and because all claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective function and the combination would have yielded predictable results.

#### ***Allowable Subject Matter***

7. Claims 1, 3-9, 11, 13-22, 24, 26-34, 36-43, 63, and 66 are allowed.

#### ***Response to Arguments***

8. Applicant's arguments with respect to claims 64 and 65 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sciulli et al. ('654 and '810), Larsson, and Olsen.

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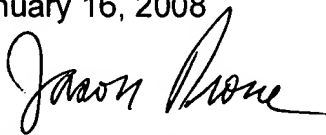
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Prone whose telephone number is (571) 272-4513. The examiner can normally be reached on 8:00-5:30, Mon - (every other) Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer D. Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

January 16, 2008



Patent Examiner  
Jason Prone  
Art Unit 3724  
T.C. 3700